PRO/019/008

April 7, 1987

TO: Non-Coal File

FROM: D. Wayne Hedberg, Data Management Coordinator DWH

RE: Field Inspection, Delores #5 Placer Mine, Kearl-Saunders, PRO/019/008, Grand County, Utah

On August 21, 1986, Division personnel Wayne Hedberg, Lynn Kunzler and Dave Wham met with Mr. Blaine Saunders at the proposed location of the Delores #5 Placer Mining operation. This operation is located on and immediately adjacent to the Delores River. Vegetative cover on-site was ocularly (?) estimated at 18 to 21 percent. Species composition is comprised of Cheatgrass, Greasewood, Ephedra, Mormon Tea, Saltbush, Shadscale, Prickly Pear cactus, Tamarisk, and a few junipers.

There was a substantial cryptogamic soil crust covering a good portion of the area proposed to be mined. The soil crust was approximately one inch thick. Two soil profiles were observed while onsite. There was an existing raw embankment immediately adjacent to the river which was a good reflection of the on-site soil conditions. There also was an eroded ephemeral drainage which bisected the proposed mine site approximately 6 feet deep, which also provided some fresh soil profile facies to be analyzed.

There was a light brown surface layer underlying the cryptogamic crust, approximately 3 to 4 inches thick. There was a transition from this layer into a somewhat darker brown silty, clayey, sandy-type soil. There were a series of interfingered sand and pebble lenses characteristic of alluvial deposits in this section of the profile, which extended down in a fairly homogeneous fashion to approximately 40-42 inches. At this point there was another transition where the profile phased into a more reddish-brown sandy, gravelley, cobble layer, which became predominantly gravels and cobbles at the 48 inch depth. This layer supposedly extends to 13 or 14 feet, according to the operator. The soil profile could not be observed any deeper than 6 to 7 feet onsite.

Four composite soil samples were taken: one from the 2-6 inch layer, another from the 15 to 18 inch level, one from the 36 inch depth, and the last sample was taken at the transitional zone just immediately above the gravel and cobble layer, at 4 1/2 feet.

Ten transects were walked across the site to get an estimate of the vegetation cover density. The point-step technique was used and an average of approximately 21 percent cover resulted from these transects.

At this time the operator's proposal will affect a maximum of five (5) acres for a one-year period. Mine life is expected to be anywhere from 10 to 15 years. The operator has not provided a description or proposal for expanding his operations beyond the 5-acre disturbance level. It is anticipated he will either amend his plan or submit a new proposal at some time in the future, prior to continued development and expansion on the operation.

Immediately adjacent to the proposed mine site area, there is evidence of previous mining activity. This activity is supposedly associated works that were created by the lessor of the property. These areas were included as disturbed on the Kearl-Saunders permit application, and he does have an aerial survey map which was reviewed on site. However, it does not show all of the disturbance which has been created to date. The operator stated he would try and locate a more current aerial survey map to revise his operations map. He will make it part of his permit application so that he is not held accountable for previous disturbance in the area. The operator did state that he would be using some of the abandoned facilities which still exist in the adjacent area to the proposed operation. These areas will be clearly identified on the revised map. The operator was informed that the Division would prepare a finalized technical review letter and submit it to the operator within the next two weeks.

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